

CERTIFICATE OF MAILING

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Rebecca A. Bellas

(Type or Print Name of Person Mailing Paper)

March 3, 2005
(Date)

(Signature of Person Mailing Paper)

Docket No. MITSP101US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Applicant: Kohmura, et al.
Serial No.: ----
Filed: HEREWITH
For: METHOD OF MODIFYING POROUS FILM, MODIFIED POROUS FILM AND USE
THEREOF
Art Unit: ----
Examiner: ----

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120: or (c) U.S. Patent(s) and published application(s) since the subject application was filed after June 30, 2003.

Serial No.: _____
Filing Date: _____

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) _____ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) _____ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

DT01 Rec'd PCT/PT 03 MAR 2005

- (a) ☒ Within 3 months of the filing date or date of entry into the National Stage.
- (b) ☐ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063 for consideration of this Statement.
- (c) ☐ Before the mailing date of a first Office Action on the merits after a first or second submission after final rejection under 37 C.F.R. 1.129(a).
- (d) ☐ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.
- (1) ☐ The required certification is given below, or
- (2) ☐ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or
- (3) ☐ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063
- (e) ☐ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.
- (1) ☐ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p), or
- (2) ☐ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063.

4. Certification (if applicable)

- (a) ☐ The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.
- (b) ☐ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

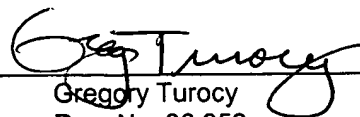
5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1063.

Respectfully Submitted,

AMIN & TUROCY, L.L.P.

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1900 East 9th Street
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By


Gregory Turocy
Reg. No. 36,952

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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

if Known **10/526688**

Application Number

Filing Date

HEREWITH

First Named Inventor

Kohmura, et al.

Art Unit

	40% 40% 50% 50%
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Examiner Name

Attorney Docket Number

MITSP101US

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of 4

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)	MM-DD-YYYY			
		WO 91/11390	8/8/1991	Mobil Oil Corp.		
		JP 2000-038509	2/8/2000	JSR Corp.		P
		WO 99/03926	1/28/1999	Asahi Kasei Kogyo		P
		WO 00/39028	7/6/2000	Battelle Memorial		
		JP 2001-049174	2/20/2001	JSR Corp.		✓
		WO 02/43119	5/30/2002	Int. Business Machines		

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

TO: Commissioner for Patents, Washington, DC 20231.

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Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Application Number	107920600
Filing Date	HEREWITH
First Named Inventor	Kohmura, et al.
Art Unit	----
Examiner Name	----
Attorney Docket Number	MITSP101US

[illegible]

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				
		JP 05-202478	8/10/1993	Dow Corning Corp.		P

Date
Considered

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STATEMENT BY APPLICANT**

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Application Number	10/526688
Filing Date	HEREWITH
First Named Inventor	Kohmura, et al.
Art Unit	----
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Attorney Docket Number	MITSP101US

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of 4

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		International Search Report, PCT/JP2003/11445, December 24, 2003	
		YANAGISAWA, et al., THE PREPARATION OF ALKYLTRIMETHYLAMMONIUM-KANEMITE COMPLEXES AND THEIR CONVERSION TO MICROPOROUS MATERIALS, Bull. Chem. Soc. Jp., Vol. 63, PP. 988-992, 1990 Japan	
		Yang, et al., SYNTHESIS OF ORIENTED FILMS OF MESOPOROUS SILICA OF MICA, Letter of Nature, Vol. 379, PP. 703-705, 1996 Canada	
		Miyata, et al., PREFERRED ALIGNMENT OF MESOCHANNELS IN A MESOPOROUS SILICA FILM GROWN ON A SILICON (110) SURFACE, J. Am. Chem. Soc., Vol. 121, PP. 7618-7624, 1999 Japan	
		Ogawa, PREPARATION OF TRANSPARENT THIN FILMS OF SILICA-SURFACTANT MESOSTRUCTURED MATERIALS, Supramolecular Science, Vol. 5, PP. 247-251, 1998 Japan	
		Zhao, et al., CONTINUOUS MESOPOROUS SILICA FILMS WITH HIGHLY ORDERED LARGE PORE STRUCTURES, Advanced Materials, Vol. 10, PP. 1380-1385, 1998 USA	
		Lu, et al., CONTINUOUS FORMATION OF SUPPORTED CUBIC AND HEXAGONAL MESOPOROUS FILMS BY SOL-GEL DIP-COATING, Letters of Nature, Vol. 389, PP. 364-368, 1997 New Mexico	
		Lu, et al., AEROSOL-ASSISTED SELF-ASSEMBLY OF MESOSTRUCTURED SPHERICAL NANOPARTICLES, Letters of Nature, Vol. 398, PP. 223-226, 1999 New Mexico	
		Zhao, et al., COMPREHENSIVE STUDY OF SURFACE CHEMISTRY OF MCM-41 USING 29SI CP/MAS NMR, FTIR, PYRIDINE-TPD, AND TGA, J. Phys. Chem. B. Vol. 101, PP.6525-6531, 1997 Australia	
		Takei, et al., WATER ADSORPTION PROPERTIES ON POROUS SILICA GLASS SURFACE MODIFIED BY TRIMETHYLSILYL GROUPS, Journal of Colloid and Interface Science, No. 188, PP. 409-414, 1997 Japan	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, Washington, DC 20231.**

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Attorney Docket Number	MITSP101US

Sheet 4 of 4

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		Chen, et al., MICROSTRUCTURE AND MECHANICAL PROPERTIES OF SURFACTANT TEMPLATED NANOPOROUS SILICA THIN FILMS: EFFECT OF METHYLSILYLATION, Journal of Electrochemical Society, Vol. 150, No. 6, PP. F123-F127, 2003 Taiwan	
		Joo, et al., FABRICATION OF NOVEL MESOPOROUS DIMETHYLSILOXANE-INCORPORATED SILICAS, Chem. Commun., PP. 1487-1488, 2000 Korea	
		Fukui, REACTIVE ULTRA-THIN FILM COATING ON POWDER BY CVD OF CYCLIC SILOXANE, Journal of Surface Science Society of Japan, Vol. 22., PP. 9-18, 2001 Japan	P
		Fujita, et al., NOTABLE IMPROVEMENT IN POROUS LOW-K FILM PROPERTIES USING ELECTRON-BEAM CURE METHOD, Iltec., PP. 106-108, 2003 Japan	

Examiner Signature

Date Considered

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